Neutral Tandem Presentation to the Federal Communications Commission

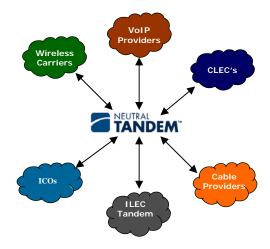




Neutral Tandem Overview

What we do:

- Provide a neutral interconnection point for carriers to exchange traffic.
 - Independent from ILEC facilities
 - Completely redundant power and transport in and out of our tandem locations
 - Saves carriers millions of dollars
- Strengthen the PSTN with Redundant tandem switching and transport.
 - Hurricane Katrina, 9/11, etc..
- Connect to over 643 competitive carrier switches in 38 markets.
- Services used by over 60 major competitive carriers, including:
 - Wireless → Sprint Nextel, T-Mobile, Cingular, US Cellular, Metro PCS...
 - Wireline → AT&T, Verizon Business, McLeod, Level 3, XO...
 - Cable → Cox, Cablevision, Comcast, RCN...
 - VoIP → Vonage, Broadvox, Reynwood, Voex...





Public Interest Benefits of Tandem Diversity: Network Reliability

Chairman Martin:

"When I first became Chairman, I identified public safety and emergency preparedness as another top priority. As memories of Hurricane Katrina and 9/11 continually remind us, one of our most important objectives is to ensure that basic public safety requirements are met."

(Senate Testimony, Sept. 12, 2006).

Commissioner Tate:

"In March 2006, at the second meeting of the FCC Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks in Mississippi, I heard personal accounts of the devastation. The one clear message I heard was the need for redundancy in communications networks."

(Senate Testimony, Feb. 1, 2007).

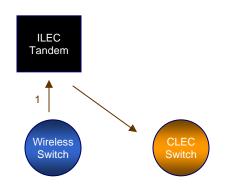


Restoring Tandem Redundancy

Legacy ILEC Prior to Competition

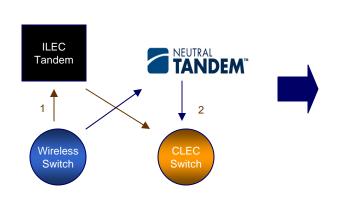
ILEC Tandem 2 3 ILEC End Office 1 ILEC End Office

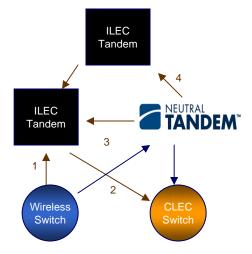
Legacy ILEC With Competitive Carriers



LEC With Introduction of Neutral Tandem

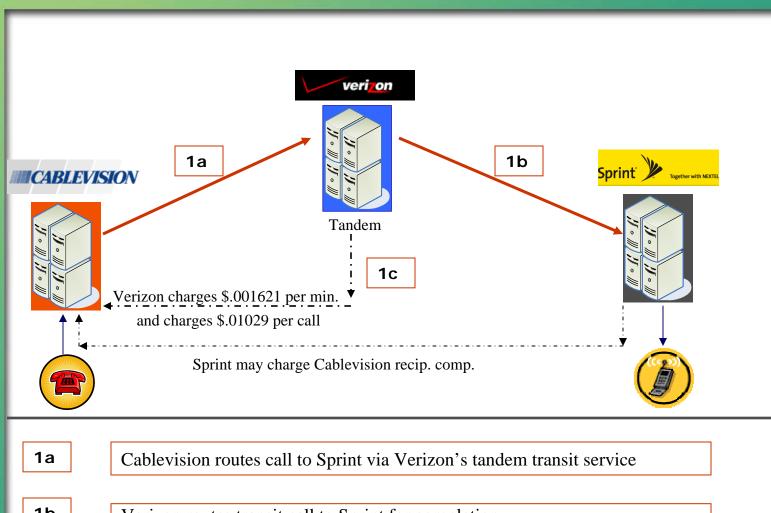
Neutral Tandem's Additional Capacity/Routes







Local Transit in New York via Verizon

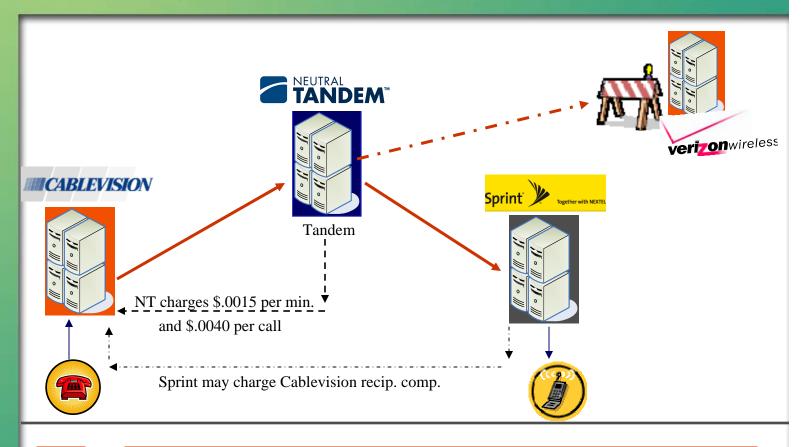


1b Verizon routes transit call to Sprint for completion

Verizon bills Cablevision for transit and Sprint may bill Cablevision for recip. comp.



Transit in New York via Neutral Tandem



- 1a Cablevision routes call to Sprint via Neutral Tandem's transit service
- 1b Neutral Tandem routes transit call to Sprint for completion
- 1c NT bills Cablevision for transit and Sprint may bill Cablevision for recip. comp.



Homeland Security Benefit: Tandem Redundancy

Before Neutral Tandem

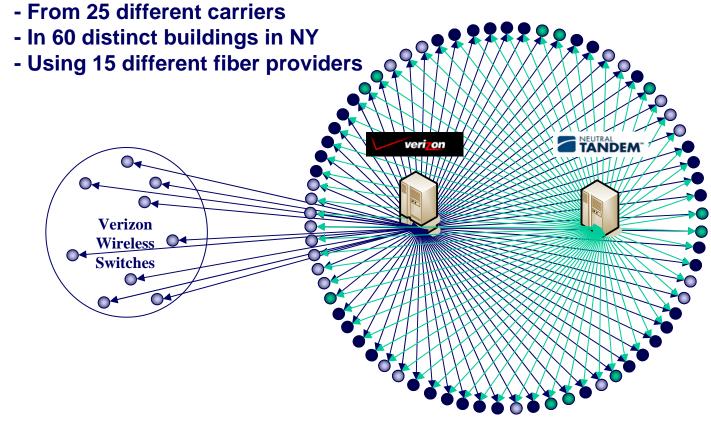
LEC tandems were a single point of failure

After Neutral Tandem

Diverse Tandems
Diverse Switch Sites
Diverse Transport
Diverse Routes

New York Example

Neutral Tandem connects 123 competitive switches in NY



Key:

Wireless Switch

CLEC Switch

Cable/IP Switch



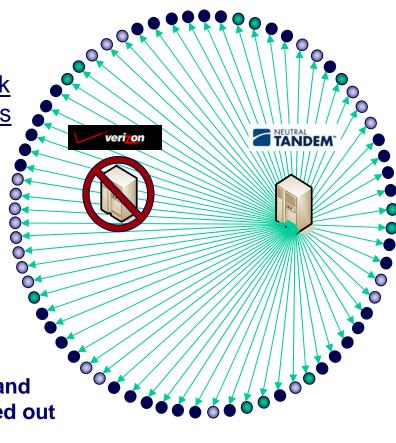
Homeland Security Benefit: Tandem Redundancy

Without Neutral Tandem:

 Verizon Wireless switches <u>lack</u> redundant tandem connections



 Exposes millions of corporate and consumer end users to extended out of service condition



Key:

Mireless Switch

CLEC Switch

Ca

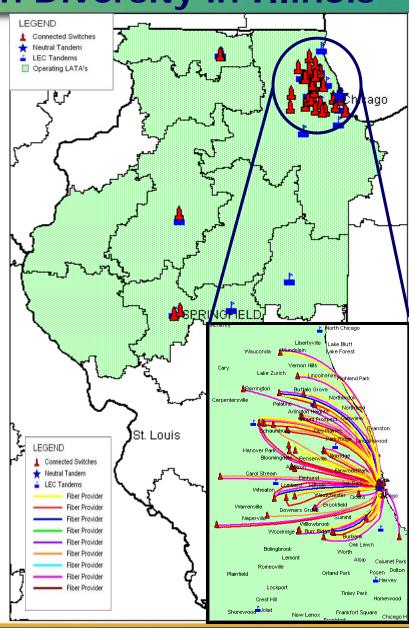
Cable/IP Switch



Tandem Path Diversity in Illinois

Neutral Tandem adds Diversity and Redundancy in both Tandem Transport and Tandem Switching

- Neutral Tandem covers all the major LATAs in the state
- Connects 100 switches in IL:
 78 competitive carrier switches;
 22 ILEC tandems
- Neutral Tandem can <u>route calls</u> to over 21M phone numbers in IL
- Neutral Tandem currently routes in excess of <u>450 Million minutes</u> per month in IL - project 6 Billion in '07
- Diverse routing using <u>10 different</u> <u>transport providers</u> for maximum redundancy
- Neutral Tandem has <u>saved</u> competitive carriers \$70 Million

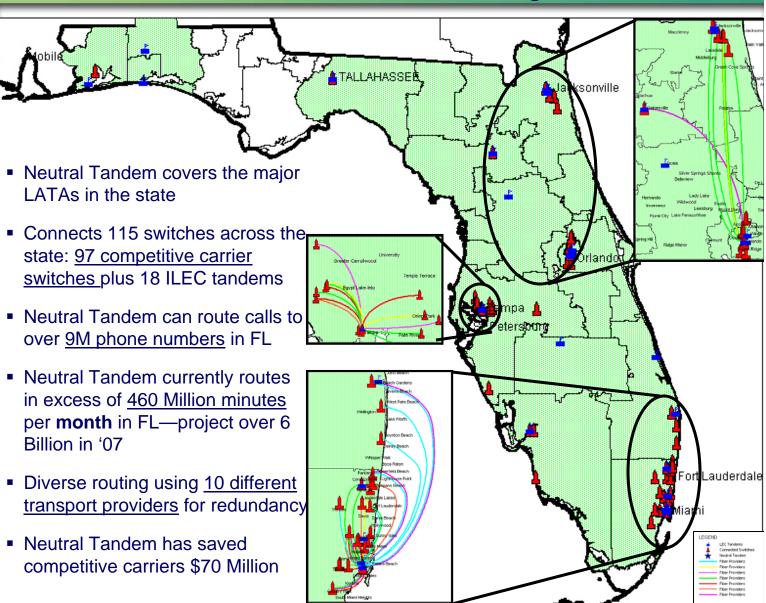


www.neutraltandem.com



Tandem Path Diversity in Florida

Neutral
Tandem adds
Diversity and
Redundancy in
both Tandem
Transport and
Switching

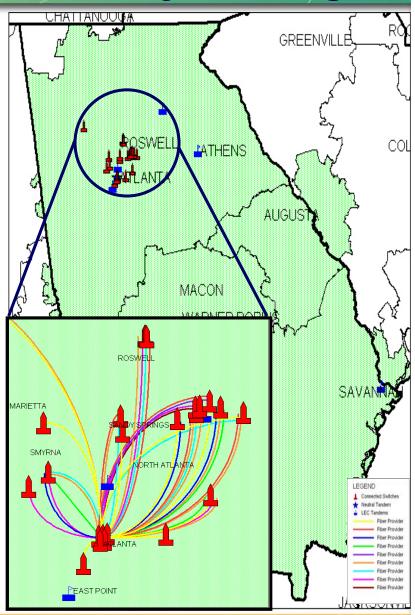




Tandem Path Diversity in Georgia

Neutral
Tandem adds
Tandem
Diversity and
Redundancy in
both Transport
and Switching

- Neutral Tandem covers the major LATAs in the state
- Connects 50 switches across the state: <u>44 competitive carrier</u> <u>switches</u> plus 6 BellSouth tandems
- Neutral Tandem can route calls to over <u>6.2M phone numbers</u> in GA
- Neutral Tandem currently routes in excess of <u>225 Million minutes</u> per **month** in GA—project 3 Billion in '07
- Diverse routing using <u>12 different</u> <u>transport providers</u> for redundancy
- Neutral Tandem has saved competitive carriers \$70 Million





Where Does the Issue Stand Today?

- FCC opened Docket 06-159 requesting comments
- Homeland Security & other benefits tied to Neutral Tandem Petition's were broadly recognized and supported by 20+ parties
 - Cities (New York & Chicago)
 - State regulators
 - Carriers including AT&T
- Verizon Wireless is as isolated in its position as its switches
- A crowded FCC agenda threatens to jeopardize a decision on this important issue impacting public safety



Public Interest Support the Petition

New York DPS:

"After the September 11 attack, we found that the wireless industry may have consistently undersized trunks interconnecting their services to wireline facilities. While this practice may make sense from a purely economic standpoint, the danger is that it can result in network 'choke points' that may easily become swamped in emergency or catastrophic situations."

City of Chicago:

"The City urges the Commission to heed the [Hurricane Katrina] panel's guidance and not limit availability of the competitive alternatives offered by Neutral Tandem, which positively affect both current emergency preparedness efforts and the City's ability to respond to a future crisis situation. Because encouraging redundancy in the PSTN in the manner requested by Neutral Tandem before disaster strikes is to the benefit of all citizens, the Petition should be granted."

City of New York:

"[New York City] has emphasized the need for increased diversity (distributed networks) and survivability in the telecommunications sector in New York. Given the instant Petition's implications for network diversity and homeland security, [New York City] reiterates those positions in this case."



Public Interest Support the Petition

Illinois Commerce Commissioner Lieberman:

"Neutral Tandem's operations as an alternate tandem service provider would add redundancy to the telecommunications network, and could minimize service disruptions in the event of natural disasters and other catastrophes."

Comptel:

"Neutral Tandem's direct connections with Verizon Wireless will advance network reliability and redundancy, will aid disaster recovery in the event of any overcapacity or outage situation, and will therefore promote homeland security."

McLeodUSA:

"The availability of an alternative, competitive tandem service also increases the network's overall efficiency, redundancy and reliability, which in turn speeds up disaster recovery efforts and bolsters homeland security."

Joint Commenters:

"[C]reating an additional termination route to Verizon Wireless promotes network reliability, diversity, homeland security, and disaster recovery across the PSTN as a whole. The benefits are especially great in areas suffering from ILEC tandem exhaust and call blocking due to that tandem over-capacity."



In Summary...

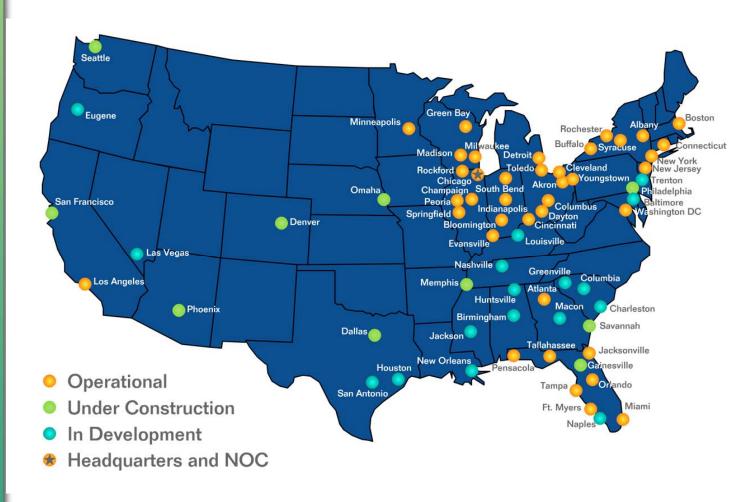
- Creating additional transport paths for routing tandem traffic is critical for network reliability
- Dependency on the legacy LEC tandems creates a critical choke point in our nation's telecom infrastructure
- Hardening the country's telecom network is <u>essential to</u> <u>Homeland Security</u>
- A solution is available to the public at no cost to taxpayers
- Great opportunity for Chairman Martin to make it clear that Homeland Security will be <u>decided based upon the</u> <u>public's interest</u> – not a lone obstructionist



Neutral Tandem's Coverage

Coverage:

- 64 LATAs across the country
- Over 155M
 phone numbers
 available to
 route to





Neutral Tandem's Connectivity

Over 60 of the leading telecom companies rely on Neutral **Tandem**

Major Wireless Carriers













































CLECs (Competitive Local Exchange Companies)

























































NUV®X

















